

**FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFA/CO)
 NEW SITE IDENTIFICATION (NSI)**

Site Title: PBF-42—Storm Water Injection Well, SPERT DISP 3	Site Code: PBF-42
	Document Number: NSI-26027

PART A

1. **Site Status:** **Potential New Site** **Existing Site**

If a potential new site, record the date entered into the Long-Term Stewardship Tracking System: 10/12/2015.

2. **Description of Site and Location:**

PBF-42 is a potential new Comprehensive Environmental, Response, Compensation, and Liability Act (CERCLA) site that comprises a deep injection well 0.9 miles southwest of the Critical Infrastructure Test Range Complex (CITRC) area (see Figure 1). The deep storm water injection well, SPERT DISP 3, is permitted and operated as a Class 5D2 injection well for storm water runoff for roadway and pavement drainage (PER-127). Because of its distance from CITRC, runoff primarily comes from undeveloped sagebrush and grassland areas (see Figure 2). Battelle Energy Alliance, LLC, custodian of the well, is considering permanently decommissioning the well (Portage 2015). However, before decommission plans can proceed, the well is being evaluated under the Operable Unit 10-08 New Site Identification process to ensure the well did not receive storm water and that there is no risk to human health or the environment.

The 254-ft-deep injection well and settling pond was constructed in 1963 as a safety measure to protect personnel and facilities during significant flooding events or high snowmelt runoff. The settling pond is 61 × 232 ft (0.33 acres). It was designed to hold sufficient volume of water to prevent flow into the injection well during all but the most extreme weather events. In 2002, the settling pond was deepened approximately 3 ft to ensure storm water stayed below the inlet (Beus 2003). The deep injection well is screened from 104 to 122 ft and 145 to 225 ft to allow water to drain to fractured bedrock. Depth to the Snake River Plain Aquifer water table is approximately 455 to 655 ft at CITRC; thus, storm water is not injected directly into the aquifer.

Very little information is available on maintenance of the well and settling pond after its construction in 1963. In 1991, the U.S. Department of Energy (DOE) submitted a permit application to the Idaho Department of Water Resources (IDWR). IDWR required characterization sampling of basin soil to assess potential contaminants that may have been discharged to the injection well (Rothman 1991). After DOE completed characterization sampling, the permit was approved with monitoring criteria in place to ensure protection of the aquifer. Monitoring of the deep injection well was managed under the Site-wide Storm Water Pollution Prevention Program from 1993 to 2001 (DOE-ID 1993), after which, monitoring was governed by the IDWR permit (PER-127).

Since 2006, very little water has been observed in the SPERT DISP 3 settling pond (LI-218), and annual monitoring reports from 2007 to 2014 state storm water did not flow into the injection well (Stenzel 2007, 2009a, 2009b, 2010, 2011, 2013; Dossett 2014; Mascareñas 2015). Historical records predating 2006—imagery from 1971, 1993, 1998, and 2004 and storm water sample logbooks from 1996 and 1998 to 2003 (Matzen 1997; Beus 2000, 2004; ICP 2001a, 2001b, 2002, 2003)—also indicate flooding did not occur and measurable storm events did not fill the pond to or above the drain inlet.

Recommendation

There is no evidence of a release of hazardous material or radiological contamination to SPERT DISP 3. Historical records from the 1970s to 1990s and more recent records from the 2000s indicate capacity of the settling pond was sufficient to prevent storm water discharges to the well during flooding and measurable storm events. Therefore, this site should not be included as a new Federal Facility Agreement and Consent Order site.

FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFA/CO) NEW SITE IDENTIFICATION (NSI)

Site Title: PBF-42—Storm Water Injection Well, SPERT DISP 3	Site Code: PBF-42
	Document Number: NSI-26027



Figure 1. CERCLA Site PBF-42 at Critical Infrastructure Test Range Complex area.

FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFA/CO) NEW SITE IDENTIFICATION (NSI)

Site Title:
PBF-42—Storm Water Injection Well, SPERT DISP 3

Site Code: PBF-42

Document Number: NSI-26027

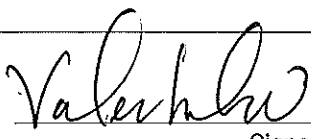
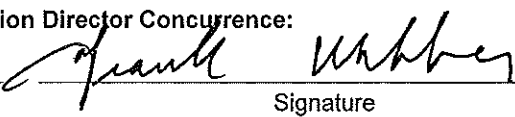


Figure 2. SPERT DISP 3 settling pond and drain inlet.

References:

- Beus, B. J., 2000, "Storm Water Sample Logbook, Date Start 01-02-1997, Date End 03-12-2000, Logbook No: STORM 003," EDMS ID 2295631, Idaho Cleanup Project, March 2000.
- Beus, B. J., Idaho National Engineering and Environmental Laboratory, interoffice memorandum, to K. L. Milmine, Idaho National Engineering and Environmental Laboratory, April 7, 2003, "Transmittal of Semiannual INEEL Inspection Checklists for Permitted Injection Wells – Inspection Dates: March 27, 2003; April 1, 2003; and April 2, 2003," BJB-4-03.
- Beus, B. J., 2004, "Storm Water Sample Logbook, Date Start 03-15-2003, Date End 08-28-2004, Logbook No: STORM 009," EDMS ID. STORM009, Idaho Cleanup Project, August 2004.
- DOE-ID, 1993, *INEL Storm Water Pollution Prevention Plan for Industrial Activities Storm Water General Permit #IDR00A194*, DOE/ID-10431, Rev. 1, U.S. Department of Energy Idaho Field Office, September 1993.
- Dossett, Sharon D., Idaho National Laboratory, letter, to Matt Anders, Idaho Department of Water Resources, January 9, 2014, "Idaho National Laboratory 2013 Annual Monitoring Report for Injection Wells Permit Numbers 34-W-003-001, 34-W-003-002, 34-W-003-003, 34-W-003-004, 34-W-003-005, 34-W-003-006, and 34-W-003-007," CCN 232073.
- ICP, 2001a, "Storm Water Sample Logbook, Date Start 03-21-2000, Date End 03-18-2001, Logbook No: STORM 004," EDMS ID STORM004, Idaho Cleanup Project, March 2001.
- ICP, 2001b, "Storm Water Sample Logbook, Date Start 03-19-2001, Date End 08-14-2001, Logbook No: STORM 005," EDMS ID STORM005, Idaho Cleanup Project, August 2001.
- ICP, 2002, "Storm Water Sample Logbook, Date Start 09-10-2001, Date End 04-16-2002, Logbook No: STORM 007," EDMS ID STORM007, Idaho Cleanup Project, April 2002.
- ICP, 2003, "Storm Water Sample Logbook, Date Start 04-17-2002, Date End 03-17-2003, Logbook No: STORM 008," EDMS ID STORM008, Idaho Cleanup Project, March 2003.
- LI-218, 2013, "Laboratory Instruction Storm Water Sampling at the INL Injection Wells," Rev. 1, Idaho National Laboratory, March 2013.
- Mascareñas, Carolyn S., Idaho National Laboratory, letter, to Brian Ragan, Idaho Department of Water Resources, January 16, 2015, "Idaho National Laboratory 2014 Annual Monitoring Report for Injection Wells, Permit Numbers 34-W-003-001, 34-W-003-002, 34-W-003-003, 34-W-003-004, 34-W-003-005, 34-W-003-006, and 34-W-003-007," CCN 234744.
- Matzen, T. A., 1997, "Storm Water Sample Logbook, Date Start 01-11-1995, Date End 01-02-1997, Logbook No: STORM 002," EDMS ID 2300014, Idaho Cleanup Project, January 1997.
- PER-127, 2012, "Injection Well Permit No. 34-W-003-003 Critical Infrastructure Test Range Complex (formerly Power Burst Facility), SPERT Disposal Well #3," Rev. 1, Idaho National Laboratory, May 2012.

**FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFA/CO)
 NEW SITE IDENTIFICATION (NSI)**

Site Title: PBF-42—Storm Water Injection Well, SPERT DISP 3	Site Code: PBF-42 Document Number: NSI-26027	
Portage, 2015, <i>Regulatory and Facility Impacts of Storm Water Injection Well Closure at the Idaho National Laboratory Site</i> , TEV-2195.42-001, Rev. 0, Portage, Inc., March 2015. Rothman, R. S., U.S. Department of Energy Idaho Operations Office, letter, to Lotwick I. Reese, Idaho Department of Water Resources, November 19, 1991, "Sampling of Soils from Injection Well Ponds at the INEL," enclosure in EDMS ID OPE-ES-93-098. Stenzel, Jo Anna, Idaho National Laboratory, letter, to Angela M. Grimm, Idaho Department of Water Resources, November 6, 2007, "Annual Monitoring Report for Permit Year 2007 for the Idaho National Laboratory Injection Wells Permit Numbers 34W003001, 34W003002, 34W003003, 34W003004, 34W003005, 34W003006, and 34W003007," CCN 211701. Stenzel, Jo Anna, Idaho National Laboratory, letter, to Matt Anders, Idaho Department of Water Resources, February 3, 2009a, "Annual Monitoring Report for Permit Year 2008 for the Idaho National Laboratory Injection Wells Permit Numbers 34W003001, 34W003002, 34W003003, 34W003004, 34W003005, 34W003006, and 34W003007," CCN 216210. Stenzel, Jo Anna, Idaho National Laboratory, letter, to Matt Anders, Idaho Department of Water Resources, November 24, 2009b, "Annual Monitoring Report for Permit Year 2009 for the Idaho National Laboratory Injection Wells Permit Numbers 34W003001, 34W003002, 34W003003, 34W003004, 34W003005, 34W003006, and 34W003007," CCN 219302. Stenzel, Jo Anna, Idaho National Laboratory, letter, to Matt Anders, Idaho Department of Water Resources, November 3, 2010, "Annual Monitoring Report for Permit Year 2010 for the Idaho National Laboratory Injection Wells Permit Numbers 34W003001, 34W003002, 34W003003, 34W003004, 34W003005, 34W003006, and 34W003007," CCN 222417. Stenzel, Jo Anna, Idaho National Laboratory, letter, to Matt Anders, Idaho Department of Water Resources, November 1, 2011, "Idaho National Laboratory 2011 Annual Monitoring Report for Injection Wells Permit Numbers 34W003001, 34W003002, 34W003003, 34W003004, 34W003005, 34W003006, and 34W003007," CCN 225743. Stenzel, Jo Anna, Idaho National Laboratory, letter, to Matt Anders, Idaho Department of Water Resources, January 15, 2013, "Idaho National Laboratory 2012 Annual Monitoring Report for Injection Wells Permit Numbers 34-W-003-001, 34-W-003-002, 34-W-003-003, 34-W-003-004, 34-W-003-005, 34-W-003-006, and 34-W-003-007," CCN 229401.		
3. Solid Waste Management Unit <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 		
4. Potential New Site Recommendation		
4a. <input checked="" type="checkbox"/> Do not include as a new FFA/CO site. Provide NSI to Agencies for information only.		
4b. <input type="checkbox"/> Include as a new FFA/CO site. Additional sampling recommended? <input type="checkbox"/> Yes – Submit Part A <input checked="" type="checkbox"/> No		
5. Existing Site Recommendation		
5a. <input type="checkbox"/> No evidence of an additional CERCLA release or other changed conditions. Provide NSI to Agencies for information only.		
5b. <input type="checkbox"/> Include as an existing FFA/CO site. Additional sampling recommended? <input type="checkbox"/> Yes – Submit Part A <input type="checkbox"/> No		
6. Prepared By:		
Valerie M. Kimbro Name (printed)	 Signature	12/22/15 Date
7. Idaho Cleanup Project Environmental Restoration Director Concurrence:		
Frank L. Webber Name (printed)	 Signature	12/22/15 Date

FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFA/CO)
NEW SITE IDENTIFICATION (NSI)

Site Title: PBF-42—Storm Water Injection Well, SPERT DISP 3	Site Code: PBF-42 Document Number: NSI-26027
--	---

PART A

8. FFA/CO Remedial Project Manager (RPM) Concurrence:

DOE-ID FFA/CO RPM: Concur with recommendation. Do not concur with recommendation.
EPA and DEQ concurrence required? Yes No

Nicole Badrov Name (printed) *Nicole Badrov* Signature 1-6-16 Date

Explanation:

EPA FFA/CO RPM: Concur with recommendation. Do not concur with recommendation.

Name (printed) Signature Date

Explanation:

DEQ FFA/CO RPM: Concur with recommendation. Do not concur with recommendation.

Name (printed) Signature Date

Explanation: